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AUTHOR Kintzer, Frederick C.
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ABSTRACT

A literature review is provided on model programs to improve articulation and transfer between two- and four-year colleges at institutional and state levels. Part I focuses on statewide program models. After presenting background on the development of transfer policies and the incorporation of articulation goals in state master plans, this section identifies four types of transfer and articulation documents in use and indicates which states use each of the following type: mandates traced to the state constitution or legislation; state system policies; voluntary interinstitutional or intersegmental agreements; and agreements primarily concerned with vocational-technical education. This section concludes with brief summaries of statewide programs and activities in Arizona, California, Florida, Illinois, Massachusetts, Minnesota, Missouri, Nevada, New York, North Carolina, Rhode Island, South Carolina, Texas, and Washington. Part II discusses interinstitutional and intersegmental activities and programs, concluding that current trends emphasize tightening of relationships between secondary and postsecondary schools. This section focuses on efforts to ensure access to higher education for disadvantaged populations and ethnic minorities; remedial education; vocational-technical education; computerized information systems; and business, industry, proprietary schools, and the military. (JMC)

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ARTICULATION AND TRANSFER:
A REVIEW OF CURRENT LITERATURE
ON STATEWIDE AND INTERINSTITUTIONAL
PROGRAM MODELS AND TRENDS

Prepared for the State of New Jersey
Department of Higher Education

March 1989

Frederick C. Kintzer
Professor Emeritus
UCLA

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FOREWORD

The author of this report was asked to provide a review of the current literature of existing national program models and trends on transfer and articulation. Accordingly, the following document contains a review of program models, statewide and interinstitutional in scope, transfer and articulation in the United States, and discussions of trends and directions. Comments are appended on the annotated bibliography of the six of the most important volumes published during the 1980s on the transfer and articulation phenomenon. Three additional bibliographies follow the annotated bibliography. The first covers sources referenced in the FOREWORD, and the initial three portions of Section I, i.e., Background, Types of Articulation and Transfer Documents, and Comments on State Involvement. The second is an alphabetical listing of materials for each of the selected states under Summaries of Selected States. The third bibliography is composed of items references under each of the five sub-areas of Section II.

The paper consists of two major sections:

1. Statewide Articulation and Transfer Program Models. Containing a background summary, identification of four types of documents, and summaries of selected states;
2. Interinstitutional and Intersegmental Activities and Programs - Reviews of Alliances. These are presented under five headings:
 - (a) Access to Higher Education for Disadvantaged Populations - Particularly Ethnic Minorities,
 - (b) Remediation,
 - (c) Vocational-Technical Education,
 - (d) Computerized Information Systems, and
 - (e) Business, Industry, Proprietary Schools, and the Military.

In this document, "articulation" refers to services provided students transferring from two- to four-year colleges and universities. Among such services are those related to matriculation and admission, counseling-advising prior to and during enrollment, financial aid, provisions for housing, part-time work on-campus, and other special services designed for transfers. The term, "transfer," is one of these services; specifically, course and credit exchange policies and procedures. Distinctions between the two terms are increasingly found in the literature. States as well as institutions and systems are beginning to favor broader and more comprehensive services for transfer students--moving beyond formulas for credit exchange toward other essential services--to strengthen transfer student experiences, to improve rates of persistence and success.

Throughout the paper, the terms "community college" and "two-year college" or "institution" and the terms "university," "four-year college," and "senior college" are interchangeable. Two other concepts used consistently in the report should be defined: associate degrees and general education packages. Four associate degrees are generally offered by two-year colleges in this country: The Associate in Arts, Associate in Science, Associate in Applied Science, and Associate in General Studies. The A.A. and A.S. degrees generally contain the same or very similar course patterns: 120 quarter- or 80 semester-hour maximum of university lower-division work approximately one-half of the baccalaureate. The A.A. often contains more course requirements and options spread over the social sciences, humanities, and fine arts. The A.S. is concentrated more in science, mathematics, business, and technical competencies. These two, consistently referred to as the transfer degrees, are sometimes called "capstone programs" leading to specialized baccalaureates in the traditional academic disciplines.

The A.A.S. degree includes a heavy concentration in a vocational-technical field, and is frequently mentioned as an occupational or semi-professional major. The number of credits is the same, but transferability is limited to baccalaureates in applied fields prominent in engineering and allied health fields. The A.G.S. degree, found primarily in the larger community colleges, is more a credential of completion with few, if any, requirements. Much of the work is not transferable, although certain courses may fit a baccalaureate pattern. Adults participating in continuing education form the clientele for the A.G.S. degree.

General education packages are often referred to as core programs or patterns. A core of general studies required for A.A. or A.S. degrees also represents the lower-division requirements for the B.A. degree. In many statewide and interinstitutional or intersegmental agreements, the general cores are specified. For example, Section 2 of the Massachusetts Commonwealth Transfer Compact (revised February 1988) lists the following minimum transfer core:

English Composition/Writing	8 semester hours
Behavioral and Social Science	9 semester hours
Humanities and Fine Arts	9 semester hours
Natural or Physical Science	8 semester hours
Mathematics	3 semester hours

These 37 credits will be applied toward the fulfillment of the general education requirements at the receiving institution.

The most enduring cores are those with options that encompass content variety and instructional flexibility.

Significance

The material in Sections I and II illustrate several trends and directions in the development of articulation and transfer, nationwide.

1. State legislatures are mandating or officially endorsing guidelines, policies, and procedural regulations. Public institutions, in particular, are noting increasing pressure from legislatures. The diminishing number of traditional age cohorts, together with the rise of transfer groups heretofore not served, encourage interinstitutional competition. Demands for state executives and legislators to take immediate action are placing public schools and colleges on the defensive, driving insecure institutions to early and premature decisions. Improved practice based on systematic research is urgently needed.

2. State governments are mandating tests and testing procedures as bases for admission to higher education or promotion within higher education. Institutions are increasingly employing tests as placement devices.

3. Quality education is a national priority, especially the strengthening of transfer education in community colleges. Pressure for this improvement is apparent in states, such as California, where university applications from graduating high school seniors are high, and community college transfer numbers are static. Evidence from other areas suggests deterioration of associate degree programs, particularly in urban sections of large community college districts where remediation is a heavy requirement.

In its recent report, Building Communities: A Vision for a New Century (Washington: AACJC, 1988), The Commission on the Future of Community Colleges, emphasized the crucial importance of a core of common learning. Strengthening general education for production careers and for lives of dignity and purpose was viewed as one of the urgent obligations now confronting community colleges. "It is important that all students should be able to put their lives in historical and social perspective..." (pp. 17-18). The Commission recommended that a general education core curriculum should

contain an international perspective including a study of nonwestern cultures. The core should also be integrated into technical and career programs. These 2 + 2 or 2 + 1 arrangements started in high school and completed in community college could be either certificate or associate degree programs. Every state should develop an "inverted degree" model in which students who complete the specialized community college curriculum would move into a general education sequence at a senior college or university. Associate of Applied Science degrees should give greater attention to communication, computational, and problem solving competencies, along with technical education (p. 21).

4. Equal access for under-represented groups to higher education has, in recent years, been given strong impetus by private foundations. State support continues to lag, particularly for improving programmatic quality.

5. High school/community college relationships, especially vocational-technical education, are rapidly expanding. These alliances are manifest through 2 + 2 programs and cooperative articulation services for transfers.

6. Greater attention is now given to articulation services for transfer students. Institutional articulation officers are commonly found throughout the nation. Policies for improving services and activities are written into the newer statewide documents.

7. Computer data systems are also rapidly developing statewide to regularize transfer information reporting.

8. Recent statements on transfer contain policies on transferability of credits for learning experiences outside traditional formats, called "extra-institutional learning," i.e., experiential (prior) learning, external degree programs, the military, and continuing education of various types. The work of the American Council on Education's Office on Educational Credit and Credentials is most important in defining and applying extrainstitutional credit.

9. Transfer alliances are emerging with employer-sponsored education. Some attention is shown to transfer relationships between community colleges and proprietary schools. This an area of emerging importance.

10. Regional articulation and transfer associations are appearing. This is a most important strategy where universities are brought into close collaboration.

SECTION I

STATEWIDE ARTICULATION AND TRANSFER PROGRAM MODELS

Background

Credit transfer has been in effect from the start of the junior college movement. For several decades, only informal interinstitutional arrangements existed. Practices were individualized often as the receiving institution--the senior college or university--demanded. The fate of the transfer student depended on separate actions taken by the registrar and director of admissions in negotiation with their junior college counterparts. There were few documents that could be called policy statements. Systematic collaborative planning lagged particularly at the state level, despite the rapid growth of two-year colleges.

The absence of articulation services and specific transfer policies and procedures characterized the early state master plans. Nineteen plans analyzed by Hurlburt (1969) beginning with the California Master Plan for Higher Education, 1960, noted this lack of attention. Hurlburt concluded that the two- and four-year transfer phenomenon was an institutional rather than a state matter. That situation is reversing. States are now taking the initiative.

State master plans created in the last 15 years contain material on transfer, and a few on articulation services. Some also contain recommendations to correct conditions of unequal treatment against transfer students. State plans for New Jersey (1973), New York-SUNY (1972), Maryland (1973), Connecticut (1974), Kansas and Oklahoma (1975), and South Carolina (1979) recognize, in varying degrees, the value of statewide articulation and transfer policy.

Developments in four states set the stage for greater statewide activities. In 1965, the Florida State Board of Education, after ten years of negotiating

including subject matter joint committees, approved an agreement guaranteeing transfer student acceptance by campuses of the university system. The same year, the Illinois General Assembly passed the Junior College Act that included transfer procedures. A statement in the 1964 Provisional Master Plan for Higher Education in Illinois provided impetus for the Act that established the legal base upon which a comprehensive plan was constructed.

In both Florida and Illinois, the agreements were not in consistent use until 1971. In that year, the Florida Formal Agreement Plan, first approved in 1965, was updated and reconfirmed. The Illinois Legally-Based Plan was adopted by the Board of Higher Education June 1, 1971.

During the same period, a third state, Georgia, was making progress toward a core curriculum formula. Initially effective in all institutions of the university system by 1969, including junior colleges, the 90 quarter-hour core provided transfer students equal opportunity to graduate with the same total credits as university "native" students.

Other states issued policy statements under a variety of auspices later in the decade: The New Jersey Full-Faith-and-Credit Policy (1973), Massachusetts Commonwealth Transfer Compact (1974), Nevada University System Articulation Policy (1974), and the Oklahoma Articulation Plan (1975). At least five more have recently joined the initial group of seven.

A transfer guide released by the Rhode Island Board of Regents in April 1980 contains specific transfer policies and articulation recommendations. In Washington, a policy on intercollege transfer was announced in December 1984. Prepared in response to 1983 legislation requiring a statewide credit transfer agreement, the Washington document incorporates a review and appeal system for resolving interinstitutional transfer disputes. The general education/associate degree requirements, in force since 1983, are probably the strongest

of any state. Missouri and Minnesota have released transfer guidelines and policies; the former in 1985, the latter in 1986. As later described, the Minnesota Higher Education Coordinating Board issued two documents: Defining College-Level Skills and Associate Degree Standards. Both statements should be valuable for states contemplating transfer policy revisions. (For bibliographic references, see state summary.)

The Colorado State Legislature has recently enacted policy and general procedures for transfer between all state-supported institutions of higher education. The policy legislation, approved in March 1988, charges the Colorado Commission on Higher Education to establish and enforce transfer agreements. The Transfer Advisory Council was created to implement the statewide policy.

By August 1, 1988, each state-supported four-year institution was required to submit a plan to the Commission showing articulation agreements and transfer guides with two-year colleges. The agreements were to be developed in arts and sciences and journalism, and in all professional degree programs. The transfer guides were to include lists of all two-year college courses, four-year college equivalents and how each course would be transferred, i.e., elective, general education, fulfilling a specific major requirement. These would be used by students and advisors. By February 1989, the individual articulation agreements and transfer guides had been approved by the Commission.

At present, about 30 of the 50 states have transfer guidelines and/or policies encompassing the major segments of higher education. In most of the others, agreements are interinstitutional or intersegmental. In only about ten states is all of higher education affected.

Types of Articulation and Transfer Documents

Four types have been identified. Each state is listed once to avoid over-complication.

1. Legally Based: Mandate Traced to State Constitution or Legislation.

These documents have several common features:

- (1) Authorization can be traced to the state constitution or legislation.
- (2) Articulation services are also included.
- (3) Completion of the associate degree is the basic qualification for transfer.
- (4) General education requirements, usually prescribed in the degree completion packages, are presented in detail.

2. State System Policies.

These documents are not legislatively mandated. They tend to be less formal and less prescriptive. They concentrate on transfer processes, with less attention than category 1 states given to articulation services. Institutions in many of these states, however, are heavily involved in transfer student services. The New York SUNY and CUNY systems are examples. Responsibility is invariably placed in a commission or in an office of the university system. This is often done by legislative action. Policies in category 2 states may have resulted from recommendations in the state master plan.

3. Voluntary Interinstitutional or Intersegmental Agreements.

Formal agreements or informal arrangements are negotiated between institutions or segments, and are not binding. Representative groups usually recognized by the appropriate state commission work out transfer details. Several states, California, North Carolina, and

Michigan, for example, sponsor innovative activities. In as many as a dozen states, small numbers of sending and receiving institutions generate comparatively few transfer applicants, thus postponing the necessity for formalizing agreements.

4. Agreements Primarily Concerned with Vocational-Technical Education.

At least six states have detailed agreements on vocational-technical course and credit transfer. Of those listed in Table A, two-year colleges in Delaware, Ohio, and Oregon also have interinstitutional academic agreements with universities. Public two-year colleges in Indiana, Maine, and South Carolina are technical institutes.

Table A

ARTICULATION AND TRANSFER:

GUIDELINES AND POLICIES IN THE FIFTY STATES

1 Mandated by Constitution or Legislation	2 State System Policies	3 Voluntary Agreements	4 Primarily Vocational- Technical
Colorado Florida Georgia Illinois Nevada Rhode Island Texas Washington	Arizona Connecticut Iowa Kansas Kentucky Louisiana Maryland Massachusetts Minnesota Missouri Montana Nebraska New Jersey New York North Carolina Oklahoma Pennsylvania Utah Virginia West Virginia Wyoming	Alabama Alaska Arkansas California Hawaii Idaho Michigan Mississippi New Hampshire New Mexico North Dakota South Dakota Tennessee Vermont Wisconsin	Delaware Indiana Maine Ohio Oregon South Carolina

Kintzer, 1988

Multiple types of agreements are found in many of the transfer-productive states. For example, the California State University System maintains a flexible arrangement with community colleges. Authorized by a systemwide executive order, community colleges have the authority to name transfer courses. In contrast, the University of California continues individual transfer agreements covered by general guidelines. In Illinois, the "Baccalaureate Compact" dating from 1970 and mandated by the 1965 Junior College Act, is still used by virtually all junior and senior institutions, but in recent years, 2 + 2 arrangements (both high school/community college occupational courses and community college/university academic fields) have become popular. Illinois could therefore be listed in both the first and second categories. A similar situation is found in Michigan, where by legislative action in 1984, the eight universities and colleges initiated degree structures to accommodate community college vocational-technical curricula. Michigan should also be listed in category 4.

Massachusetts is a special case in point. Although the Commonwealth Transfer Compact emerged directly from Section V of the Regents' Long Range Plan, the State Transfer Articulation Association is a voluntary organization dealing exclusively with student transfer issues. While not the policy organization for the Commonwealth, the Association is influential in policy development.

Size of the potential transfer student population and the number of institutions are obviously crucial factors in the state's attention to articulation and transfer. South Dakota with no community colleges and only one independent junior college would have little need for statewide policy. Similarly, Idaho with two community colleges manages its transfer business through departmental understandings. However, there are notable exceptions.

Articulation and transfer policies for the University of Nevada system were written into the system code. A common numbering system was mandated despite small transfer numbers. Although Rhode Island has only one community college, the 1980 Transfer Guide provides for course and program transfer as well as articulation services.

By the mid-seventies, evidence of statewide and institutional attention to transfer had appeared in at least one-half of the states. A 1976 study by the author indicated that 27 states had developed state system guidelines and policies. Twelve had transfer agreements reached voluntarily between institutions. Six confined institutional agreements to vocational-technical credit exchange.

By 1988, changes in Colorado, Nevada, Rhode Island, and Washington had warranted shifting these states to the first category shown in Table A. Increasing legislative involvement policies on articulation services, and precision in general education requirements were leading factors. While the number of those reclassified is small, several of the more transfer popular states, including California, are moving toward legislative prescription. Policies on articulation services are also appearing, i.e., attention to information exchange, counseling-advising, and other specialized transfer student services.

Recent agreements use various types of associate degrees as standards, and stipulate general education packages. The 2 + 2 concept is rapidly gaining popularity. (See Section II for Parnell's definition and explanation.) Considerable policy attention is given to higher education access for ethnic minorities and other high risk groups, and to assessment and remediation. Statewide computerized data bases are spreading over the country. A variety of information systems on transfer student movement and performance indicators

are in wide use. Data uniformity is one of the pressing needs. Dissimilarities in institutional reporting present major difficulties to state agencies responsible for budget preparation.

Universities in Colorado and California and community college districts in Arizona and Florida are leading in the development of computerized information systems. Speed and accuracy are major contributions.

The New Jersey "Full-Faith-and-Credit" Transfer Policy

The New Jersey "Full-Faith-and-Credit" Transfer Policy adopted in May 1973 and endorsed in the 1981 Statewide Plan for Higher Education extended the principle of accommodation found in the Master Plan for Higher Education: Goals for Higher Education in New Jersey, January 1970. Graduates of approved transfer curriculums were guaranteed places in the state college system. As added to the statewide policy in 1983, all general education credits earned by county college graduates were to apply toward general education requirements established by state colleges. A Joint Articulation Task Force was established to facilitate the transfer policy. More recently, a Transfer Advisory Board was created to review the need for changes and additions to the policy, i.e., whether to include Rutgers University and NJIT, and how to improve communication between the state and county colleges.

In the last two years, two major studies have been conducted on transfer and articulation. The first, in April 1987, focused on the county colleges, and the second, completed in July 1987, was an analysis of issues and problems involving the county and state college systems.

The current report, a review of the current literature of existing national program models and trends on transfer and articulation, appears to be a part of the continuing effort by the Department of Higher Education to improve statewide transfer and articulation relationships.

Comments on State Involvement

As indicated in Table A, legal authorization or legislative direction is a leading characteristic in documents of the eight category 1 states. Legislative relationships in category 2 states are less direct. Appointment of the responsible commission and general support for improving transfer more often characterize legislative attitude. Flexibility is an asset in states where legislative involvement is more supportive than prescriptive. The variety of activities in California and New York, for example, are attributed, in part, to lighter involvement of state governments and state commissions. In such situations, institutions are able to exercise greater discretion in responding to the needs of transfer-bound students. Decisions are likely to be reached more often on consensus than control. National interest in extending equal access, and at the same time, tightening higher education standards, including two-year colleges, are pushing state legislatures toward prescriptive legislation, i.e., core curricula, lower- and upper-division liberal arts components of a baccalaureate degree. The probability of greater state government involvement is virtually assured.

How can institutions balance the growing power of the state legislature? Communication must start at the local level, preferably through an institutional spokesperson who funnels information on student problems, and an institutional research officer who gathers and translates information about students. Statewide coordinating organizations vary from articulation officers associations to boards or commissions of higher education. In any situation, data collection must be uniform and must start "at home."

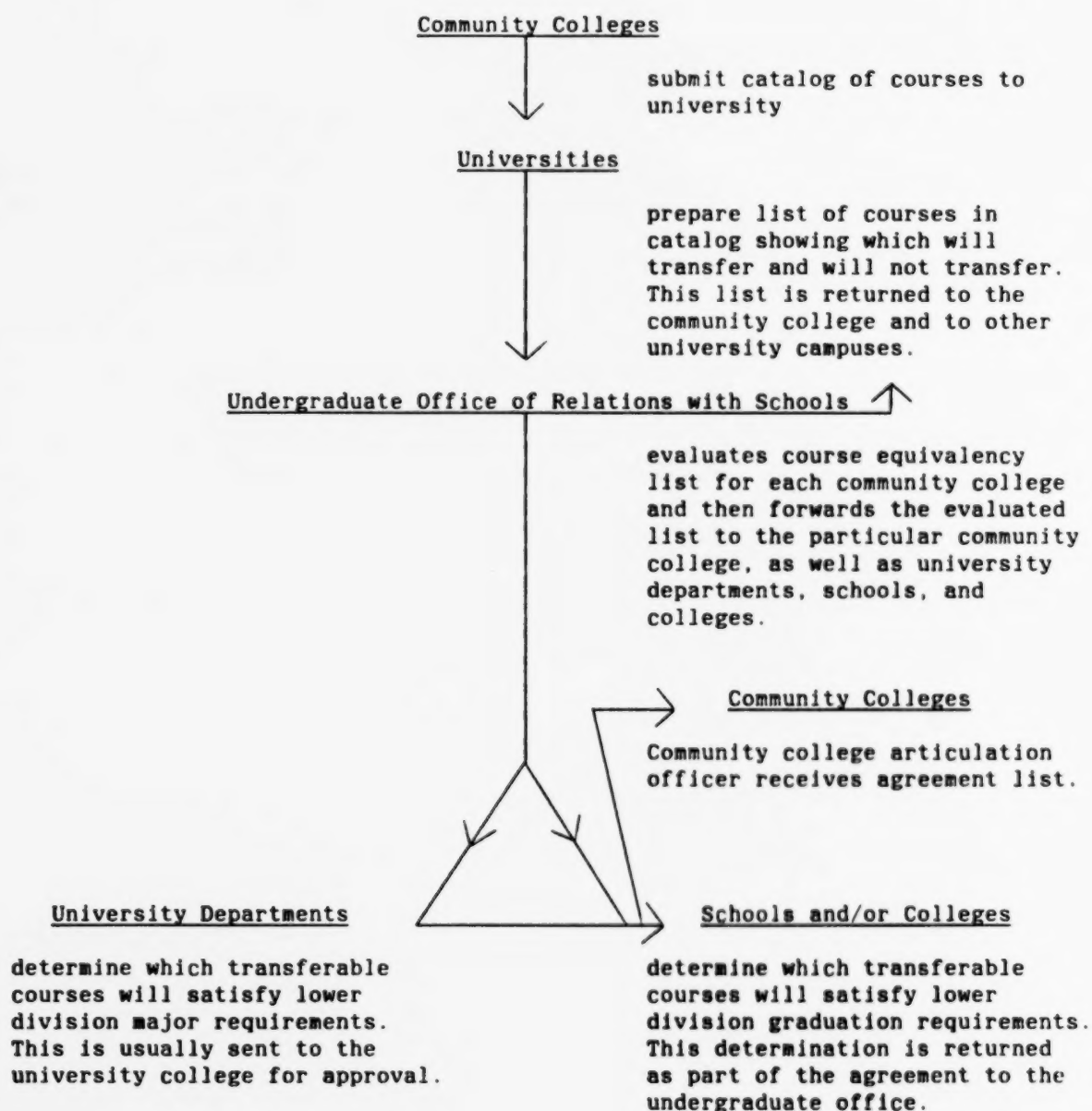
Success of articulation/transfer agreements, however, is not necessarily assured by the accuracy of the writing. Attitude is a vital ingredient--the willingness or reluctance of personnel at all student contact levels to put

students ahead of administrative expediency. Ultimate success is more dependent on continuing communication and cooperation. Bending a rule, sacrificing an advantage, is occasionally necessary.

Two models are presented for use by state commissions developing or revising agreements. The first actually outlines a chronology of events beginning with the submission of a list of courses indicated as transferable by the community college, and completed when agreed by university departments, schools, and colleges. Table B suggests an undergraduate office of school relations as the staff intermediary for the receiving institution. The second model (Table C) offers a statewide structure for solving problems. It also depicts the legal structure, patterns of communication, and a student appeal mechanism. The box containing "professional association" refers to regional and professional accrediting agencies and the American Association of Collegiate Registrars and Admissions Officers (AACRAO). The AACRAO publication, Report of Credit Given--a summary of credit recommendations for transfer--is still widely used as the official document in states where no specific statewide policy exists, i.e., Michigan and Wisconsin.

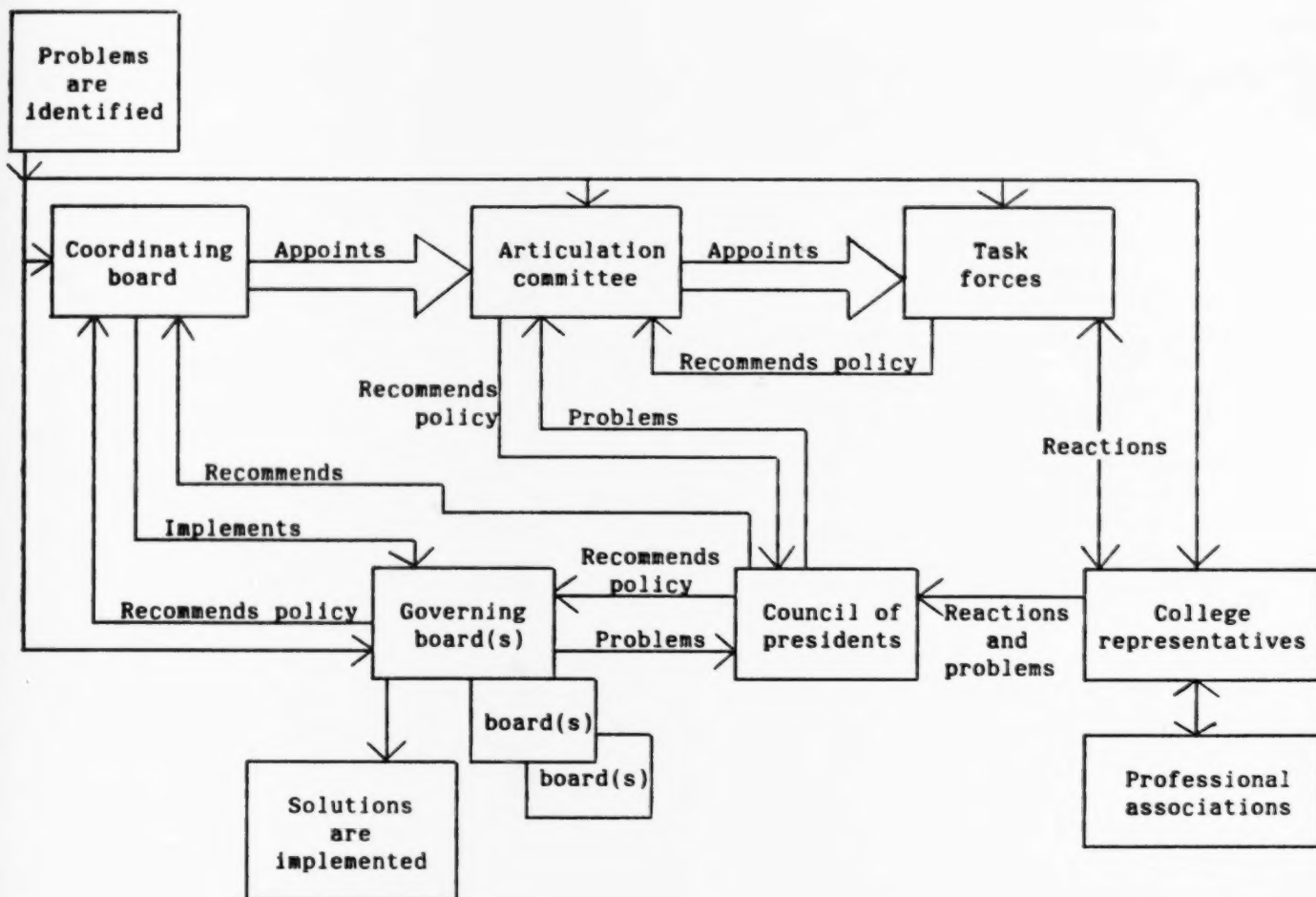
States chosen for the reviews concluding this major section have undergone greatest change in the management and content of articulation/transfer agreements. The 14 states are scattered among the four Table A categories, and are representative of the major trends described in greater detail in the final section.

Table B
GUIDE TO COURSE TRANSFER



Source: Kintzer and Wattenbarger

Table C
GUIDE FOR DEVELOPING SOLUTIONS
TO THE STATEWIDE ARTICULATION AND TRANSFER PROBLEMS



Source: Kintzer and Wattenbarger

Summaries of Selected States

Briefs of selected states concentrate on statewide programs and activities. However, interinstitutional and intersegmental transfer alliances and articulation relationships are also included. Jointly-sponsored projects in Arizona, California, New York, and North Carolina are described in some detail, since these states provide models for various aspects of articulation and transfer. Latest information was obtained from key officials and the most recent publications.

A summary statement on New Jersey's "Full-Faith-and-Credit" policy is found in an earlier section.

Significant features of the approaches to transfer and articulation by target states are given in Table D. Mailing addresses and, in some cases, telephone numbers are provided in the discussions to speed communication should the staff of the Department of Higher Education wish to make inquiries.

Arizona

An upsurge of activities in Arizona has occurred in the last two years. Under the impetus of a four-state WICHE project, single discipline articulation task forces have been appointed to work out agreements. Twenty-one disciplines have been selected. A handbook for the task forces could serve as a model for other states.

Membership on the statewide Articulation Steering Committee established in 1983 by the Board of Regents and State Board of Directors for Community Colleges, is equally divided between the two-year college and university systems. Five sub-committees have been named, i.e., college curriculum, college articulation, interdisciplinary articulation, departmental articulation, and transition courses. An exchange of university and community college

faculties has been implemented. Community colleges offer upper-division courses in a few major areas. A six-month warning on new courses offered by either system has been initiated. A degree audit system, including computerized advising and graduation verifications has also been developed. Vocational-technical course transfer agreements, particularly between high schools and community colleges, will be reported in a later section.

Among the long range objectives is the development of a standard definition of "transfer student." The achievement of this goal has far reaching significance beyond the State of Arizona.

Arizona State University and the Maricopa Community Colleges, both in the greater Phoenix area, have developed voluntary transfer agreements. Following the state Higher Education Equivalency Guide introduced first in 1974, the university/community college agreements include course equivalency comparisons in academic and technical B.A. degree programs. Remedial instruction is jointly provided. Transcripts are electronically transmitted.

Information on Arizona's initiative in developing 2 + 2 agreements and how these affect transfer is found in discussion of Remediation (Section II).

California

The two California senior higher education systems, The University of California and the State University, have different systemwide policies on articulation and transfer. UC campuses have established their own transfer policies within universitywide guidelines. A core curriculum was developed and made effective for Fall 1988. A set of courses is specified in six subject areas to be used by transfers in satisfying breadth (general education) requirements on any "receiving" campus. Transfer students have the option of fulfilling the core curriculum or completing the specific requirements of a

particular campus. Characteristic of other recent core curricula, foreign language is included as a required subject area, and the mathematics requirement may be met by a minimum score in the SAT or the College Board Achievement Test. The strengthening of the university's central system follows the trend observed in other states.

The state university system's policy has been, and continues to be, more specific. Community colleges name their own transfer courses with the regional state universities. Course applications are negotiated through articulation officers employed by all two- and four-year institutions.

Major attention in this summary will be given to several recent developments sponsored by statewide organizations, notably the California Postsecondary Education Commission.

California Postsecondary Education Commission

The year 1984-1985 was declared "The Year of the Transfer Function" by the Commission. This action was symptomatic of an emerging priority. Since 1980, a number of important studies have been completed by the research division. These include at least three updates of community college transfer student statistics, a report on common numbering systems, and a significant series of staff papers on "Missions and Functions of the California Community Colleges." The work of the Ad Hoc Committee on Community College Transfer initiated by the Commission may be a catalyst for widespread efforts to understand and assess transfer education. Reaffirming California's Commitment to Transfer (March 1985) contains a series of recommendations to improve student transfer.

Transfer, Articulation, and Collaboration Twenty-Five Years Later: A Restudy of Relationships Between Two- and Four-Year Institutions (April 1987), is a landmark document of the Commission's Ford Foundation-funded study. This comprehensive report prepared by Dorothy Knoell offers analyses of legislatively

mandated policies and statewide practices in 11 states. State profiles are provided. The concluding seven or eight chapters are devoted to major developments in articulation and transfer. The final chapters contain the most complete summaries found in the literature.

The CPEC publication, Strengthening Transfer and Articulation Policies and Practices in California's Colleges and Universities (November 1987) describes progress made since 1985 in improving articulation and transfer among the tripartite system. Chapter 3 accounts for the progress made in implementing recommendations presented to the public higher education systems in the previously-named document: Reaffirming California's Commitment to Transfer (March 1985). Chapter 4: "Implications for California," is an invaluable resource for commissions and agencies in other states. Titles of several sections illustrate this point: "State Roles in Policy Making...", "Statewide versus Regional or Localized Agreements and Arrangements," "Assessment and Remediation as Articulation Issues," "Transfer Opportunities for Ethnic Minority and other Disadvantaged Students," "Data bases and Information Systems."

Concerning the role of states policy making, legislatures are advised to concentrate on monitoring student flow and progress, identifying transfer and articulation problems, and providing adequate funding for programs and services, rather than mandating specific policies and regulating student flow. Legislatures were further advised through this national study to reaffirm statewide policies that may have been adopted in master plans or other legal or quasi-legal documents. This CPEC publication should be in all state libraries.

The California Commission's annual publication on community college transfer is one of the few issued regularly in the United States. (Similar

documents are periodically published in Florida, Illinois, and New York.) The California reports summarize the number and ethnicity of community college transfers. Persistence and success statistics are reported regularly.

California Community Colleges

An emphasis on transfer was also announced in 1985 by the Community College State Board of Governors. The work of the analytical studies unit is strategic in the statewide build-up. The document, Transfer Education, is a thorough and detailed examination of transfer activity, including number rates, intercollege differences, and transfer student performance.

A formula developed for assessing transfer numbers, a statistical regression model permitting analyses of the impact on transfer number of certain variables, should assist research units in other states.

The Board of Governors issues information bulletins on articulation with senior institutions. Bulletin 4 dated January 21-22, 1988, briefs several statewide projects; The California Articulation Number (CAN) Project, 2+2+2 programs, project ASSIST--an on-line microcomputer support course planning system. An important appendix item would be useful in other states: "The Role and Responsibilities of the Articulation Officer."

California Round Table on Educational Opportunity

Academic curriculum planning partnerships are growing in popularity. The California Round Table recently released a document prepared by statewide academic senate representatives on the three public higher education segments that recommends competencies expected of entering college freshmen in English and mathematics. The statement is intended to assist junior and senior high school teachers in curriculum development, with the ultimate purpose of preparing students for a successful collegiate experience. Similar statements in other academic areas are in preparation, e.g., sciences and fine arts.

Center for Academic Interinstitutional Programs (CAIP)

UCLA has developed a series of collaborative activities through the Center for Academic Interinstitutional Programs to strengthen liaison with primary and secondary schools, and community colleges. The specific objective of the Center is to increase retention and success of university freshmen from high school and community college graduates who transfer as juniors. Liaison activities are developed primarily among the faculty. Professional development workshops are regularly organized by faculty teams, i.e., foreign language proficiency testing, writing-across-the-curriculum, and computers in the classroom.

Faculty alliances have been organized in a variety of academic fields. Interaction meetings are held regularly to discuss common curricular and instructional issues. Some, in English composition, mathematics, and geography, have developed course outlines and model classroom techniques for teachers. The Transfer Alliance Program is an example of a university-initiated faculty-based, shared policy making program. Priority university admission to graduates of TAP community colleges is guaranteed. TAP membership includes rigorous transfer curricula called "Core Honors Curricula" or "Honors Transfers Curricula." Community colleges agree to offer enriched general education courses and lower-division major courses and science laboratories regardless of enrollment, monitor student progress, and provide transfer workshops, and visit the University regularly. In addition to guaranteeing admission, the University encourages high school seniors denied admission to enter a TAP program, provide TAP community college students special privileges, i.e., library use cards and visits to departments and classes. The University also conducts research and evaluation projects to

improve the alliances. One of these is a research effort to identify reverse transfer students and arrange their re-entrance to the University.

A publication series jointly produced by university and community college faculty is underway. Two books written by the geography alliance group, the original faculty team, are used as models for other subject alliances.

The UCLA Center for Academic Interinstitutional Programs has developed special programs to improve opportunities for Spanish-speaking students trying to complete high school and prepare to enter college/university. A soon-to-be-released sourcebook for teachers identified below contains detailed accounts of new learning techniques utilized at home/school sites by volunteer teachers from high schools and community colleges. Multi-sensory approaches to learning and total physical response to language study are emphasized.

These and other materials may be obtained from the UCLA Office of Academic Interinstitutional Programs, Gayley Center, Los Angeles, CA, 90024-1372:

Clemons, Joan and Lloyd Thomas. "A Report of Collaboration: Using Writing in the Transfer Alliance Program between Eleven Community Colleges and UCLA." Social Science Perspectives Journal, 1:5, 1987.

From Literacy to Literature, Reading and Writing for the Minority Student: A Sourcebook for Teachers, 1989. (For information, contact Pat Taylor, 213-206-6123.)

Geographic Perspective on American Westward Expansion: A Teaching Module for the U.S. History and Geography Curriculum (1987).

Introducing Physical Geography: A Laboratory Sourcebook for Community Colleges (1985).

Lara, Juan Francisco. Community College Programs. Center for Academic Interinstitutional Programs, Graduate School of Education, UCLA (undated).

A Review of The Master Plan for Higher Education

Two commissions appointed by the California Legislature in 1984 to review the 1960 Master Plan for Higher Education have recently completed reports: The Master Plan Renewed, and Strengthening Transfer and Articulation. Both

documents stress the importance of transfer as a primary function of community colleges and reaffirm the place of the state's community colleges in the higher education tripartite system. Articulation services for transfer students are prominent among the many recommendations offered in both publications.

State Legislation

The State Legislature has been active in promoting intersegmental relations, but has not as yet issued policy on articulation and transfer. The California Academic Partnership Program created by statute in 1983 created two-year funded proposals to improve the quality of education through measurable outcomes. All involve linkages among and between public school districts, community colleges, and universities. Activities include writing projects, diagnostic testing, and mathematics and sciences. Key groups are student affairs officers, counselors, and faculty.

Transfer centers have also been designated through state funding. The centers, established in 1985 on several University of California, California State University, and California Community College campuses, now provide current information about transfer programs and articulation services at both two- and four-year campuses in a particular region. An articulation officer is assigned to each transfer center. Some of the center officers have joint appointments at a nearby university or community college campus. The centers serve faculty, counselors, and transfer and transfer-bound students.

Articulation Council of California

The Articulation Council is a voluntary nonprofit group that has been operating for over 60 years. Membership on the Board of Directors is equal among the participating segments, as is membership on the various liaison committees. Council members from the tripartite higher education systems, public schools, and independent institutions meet annually. Much of the

schedule is given to two-way discussions on issues and procedural matters. Student participation on liaison committees is permitted, and some committees have chosen to add student members.

The work of the committees and the Board is concerned with easing the flow of students. The primary vehicle for this is through decisions on issues reached by liaison committees. The Council is nongovernmental, voluntary, and self-regulating. It was the first statewide organization created to monitor articulation and transfer.

Florida

The Florida Formal Agreement Plan, as previously mentioned, was the first statewide agreement on general education requirements at the lower-division. Approved by the State Board of Education in 1965 and reconfirmed in 1971, the pact was based on the belief that transfer should be accomplished without administrative interference, and that protection of the integrity of institutions was paramount. The notion of institutional primary in establishing and applying transfer policies and practices affecting itinerant students remains a basic premise, as state government improves its position in the struggle for control of articulation and transfer. Third party assistance from the state in support of unilateral action of institutions and coordination among several, would include state-arranged opportunities for inter-institutional negotiation, legitimating forthcoming policies, developing assessment instruments, evaluating results, exchanging information, and funding experimental arrangements.

Four developments in Florida have significantly changed the original plan: (1) statewide common course numbering system, (2) a common calendar, (3) the adoption of the College-Level Academic Skills Test, and (4) a common entry

test that became effective early in 1985. These diversified developments indicate the broad scope of statewide policy-making by the State Board of Education under legislative authorization.

Common Course Numbering System

Florida's common course numbering system was authorized by state legislation soon after the general education agreement was established. By 1983, over 150 subject areas and about 55,000 courses had been included. The objectives of the system were to facilitate course and credit transfer, to reduce detailed transfer decisions by counselors and administrative officers, and to prevent needless repetition of courses. Continuous updating and evaluation of the system is a major complication and expense, particularly as the state higher education system grows. Students continue to question transferring credits to a state university from a community college despite the common course numbering system. Nevertheless, common numbering systems and alternative plans have been completed in several states and are being discussed in many.

Common Academic Calendar

All Florida universities and community colleges were placed on the same academic calendar in February 1980 by the State Board of Education. The system is administered by an agency within the staff of the State Board of Education.

The College-Level Academic Skills Test

The College-Level Academic Skills Test, an achievement test developed by the Department of Education designed to measure college-level communication and computation skills, was developed for use in universities and community colleges beginning October 1982. The test has been scored and normative data developed. Cut-off scores have been established (roughly 50 percent correct

answers). Those who pass three of the four sections of CLAST may enroll in up to 36 credit hours in upper-division before having to pass the fourth section. The non-passers will not be permitted to continue in a Florida public university. The common entry tests may be repeated until passed.

In an effort to avoid heavy student failure, institutions are offering prep classes, individual tutoring, and providing self-study workbooks. Tougher passing standards are predicted as the state attempts to force the strengthening of high school and community college courses, as well as career counseling. Opponents of the state plan question the reasoning behind the testing program, questioning the long-term values of forced learning and the validity of the tests themselves.

CLAST is now a way of life, but fear continues among academics that the tests are neither valid nor reliable. This may be partially responsible for Miami Dade Community College's strong push toward quality education. Defining and standardizing general education is one of the college's current priorities.

A study was conducted in January 1987 in response to a legislative mandate to determine the advisability of developing a statewide transfer agreement between public and non-public postsecondary institutions. A national survey indicated that no states had such a comprehensive agreement. While the survey of the public sector showed little interest, all but one of the independent sector responders were in favor. The public group's negative reaction may well prove to be a major oversight.

Illinois

The State of Illinois has been actively involved in articulation and transfer for two decades. Rapid growth in community college education prompted the creation of the Baccalaureate Articulation Compact in the early

1970s. By 1976, virtually all two- and four-year schools had endorsed the document, at least in principle.

A statement in the 1964 Illinois Master Plan for Higher Education recommended the development of the plan, and the Junior College Act of 1965 mandated the recommendation. Similar to the Florida Plan, the statement gives preference to those who have completed associate degrees. Occupational-type credit is omitted.

The Compact, voluntarily developed by intersegmental committees, requires that associate degree graduates be accepted as juniors at public universities, and guaranteed graduation after two more years of successful work in the same program. Although the proposal was tabled for about two years largely on the urging of the University, considerable progress has recently been made to strengthen its implementation.

The Illinois Community College Board has taken the initiative in resolving institutional differences. Acting on the legislative mandate of the Illinois Junior College Act, the State Board continues to coordinate studies in a dozen or more curricular areas.

While the Compact is still observed, community colleges are now favoring 2 + 2 occupational agreements that are individually arranged with senior institutions. These are similar to the 2 + 2 tech prep/associate degree agreements gaining popularity across the country.

Illinois has taken leadership in resolving difficult subject transfer problems that persist in business education. ~~The major difficulty arises from~~ one of the standards of the American Assembly of Collegiate Schools of Business that recommends concentration of professional courses in business only in the upper-division, and limited work in the lower-division. This obviously limits the participation of two-year colleges. As indicated in a

recent Board of Higher Education report, Illinois universities now review community college course outlines and offer substitute course lists to add flexibility to the credit transfer process. Although this procedure may appear to be a step backward, it is actually a logical first step in solving a difficult and persistent problem.

The State Community College Board was instrumental in persuading both public and private institutions to appoint articulation coordinators with decision making authority. The first state agency to start that type of association, the transfer coordinators meet several times a year to review the status of articulation and transfer.

Illinois continues as one of the aggressive states in transfer student follow-up studies. The most recent study identifies the number and mobility patterns of community college students, pre-transfer characteristics, levels of persistence, B.A. completion, and after-transfer performance.

Massachusetts

The Massachusetts Commonwealth Transfer Compact was one of the early statewide agreements. While the Compact itself was negotiated and developed voluntarily by intersegmental representatives, official support for the Compact was given in the Regents Long Range Plan, Section V.

The basis for the agreement as amended in 1984 is the acceptance of associate degree programs containing a minimum of 60 hours and maximum of 66 hours of undergraduate college-level study. Reference is made to the associate degree acceptance as one small step toward a total agreement that would eventually include policies on the transfer of individual courses or packages prior to degree completion. Community colleges are now allowed to determine placement of transfer courses in English, social science,

mathematics/sciences, and fine arts. For example, business mathematics could apply toward the math requirement, and speech toward the humanities group. Similar to the arrangement in California between community colleges and state university campuses, the placement of Massachusetts community college transfer courses at the University are subject to university faculty approval.

The revised Compact completed in 1984 includes several important changes. The new statement provides for a Transfer Coordinating Committee, requires the appointment of a transfer officer at every institution, and recognizes the allocation of space for all transfer-accepted students. The revision distinguishes between the A.A. and A.S. degrees, the latter placing greater emphasis on scientific, mathematical, and technical competencies. Model transfer programs in business administration and engineering have also been developed. Completion of the A.A. degree remains the fundamental requirement.

Program integration with distinctions between the two associate degrees and provisions for strengthening coordination, information exchange, and transfer services is an advantage found in the revised Compact. A second revision submitted in February 1988 to the Board of Regents of Higher Education adds a student appeals provision.

The State Transfer Articulation Association was expanded in 1984 to include all New England States. The NETAA now acts as the forum for transfer exchange in the entire Northeast region. The Association holds an annual Spring workshop--working sessions on evaluating issues and new directions.

Minnesota

The Minnesota Higher Education Coordinating Board has released three documents since 1980 identifying trends in statewide articulation and transfer. The rapid growth in the awarding of associate degrees by

non-collegiate postsecondary schools--private vocational schools whose graduates are often not well-grounded in basic skills--prompted the publication, Definition of College-Level Skills.

The skills publication includes statements on reading, writing, and mathematics. Each section contains general expectations and standards in college degree programs, identification of specific required skills. What is expected in these basic areas and examples of assignments that students should anticipate are appended. Detailed illustrations of college-level reading assignments are included in the mini-teaching syllabi (see the California report for an expansion of this intersegmental work).

Academic Degree Standards, the second publication, updates the general guidelines released in October 1980. The 1986 document contains a transfer agreement of general education for community colleges to the State University. A list of liberal arts courses in each community college's A.A. degree is provided the State University System. Joint committees meet annually to verify course and credit exchanges.

A third paper on remedial and skills development instruction published in May 1984 documents the varying degree credit policies for basic courses. What is "developmental" at one school is "college credit" at another.

Minnesota has joined the growing group of states initiating policy on college-level skills to regularize the definitions of "developmental" and "college-level" work.

Missouri

The State of Missouri has had an articulation agreement between and among public institutions of higher education since 1973. The original document contained two policies similar to others developed at that time.

Characteristic of that era, transfer of vocational-technical credits was negotiable:

1. Students having completed not fewer than 36 semester hours of general education are not required to take further lower-division general education courses after transfer. Those transferring with the associate degree and not having met the general education requirements will have transcripts evaluated on a course-by-course basis at the receiving institution.

2. After completing an associate of arts degree of not less than 60 semester hours oriented toward a baccalaureate degree with at least a 2.0 GPA, students will be admitted to a senior college or university as having junior standing and having fulfilled lower-division general education, but not necessarily having met specialized lower-division requirements imposed by departments or divisions.

A 1985 document issued by the Missouri State Coordinating Board for Higher Education contains sections not found earlier, i.e., transferring without a degree, credit for experiential learning, and an appeal process for students.

An intersegmental transfer/articulation committee was named and functions stipulated. Presidents of all institutions were required to appoint an articulation officer and develop a job description for that position.

Nevada

Characteristic of states with university/community college systems, articulation/transfer policies are centralized in the governance of the University of Nevada. A university articulation board is the official body answering for the Chancellor and the Board of Regents.

"Capstone programs" beginning with associate degrees lead to specialized baccalaureates, i.e., Bachelor of Applied Science. University campuses are prohibited from requiring credit validation examinations of transfer students. Two other sections in the Codification of Board Policy Statements published by the University of Nevada Board of Regents refer to articulation services that are unusual in state transfer agreements, i.e., joint curriculum planning (section 10) and counseling and advising (section 13).

Nevada has also adopted a common course numbering system. Letter designators indicate community college course transfer values: "a" courses are general education, "b" courses are community services, and "d" courses are university lower-division equivalents. "B" designated courses, signifying "non-transferable," are regularly reviewed by the university articulation board.

New York

The State of New York, through its several independent systems, strongly emphasizes transfer--to increase options for transfers, and encourages structural flexibility. The State University of New York Board of Trustees adopted a transfer policy resolution in 1980 reaffirming and strengthening its original 1972 position. Two-year college graduates are assured full junior standing with opportunity to complete a baccalaureate within four more semesters of full-time work. The 1980 reaffirmation gives full power to the presidents of the colleges to negotiate problems.

Many SUNY colleges have 2 + 2 academic transfer contracts with SUNY senior institutions, and transfer booklets are increasingly popular as joint enterprises. Joint admissions programs are also being established. The 1986 SUNY application, a form used by all institutions, carries a formal application for approved joint admissions. The existing agreements include sections on articulation services, e.g., academic advisement, special information services.

The Regents have long given emphasis to improving and broadening transfer options and articulation services. Structural flexibility and breadth, including elementary, secondary, and higher education in both public and private sectors, accommodates a diversity of projects. The Science and Technology Entry Program (STEP) is a recent example. Both junior (community)

colleges and senior institutions apply for funds to assist disadvantaged secondary school graduates in preparing for college courses in sciences, health-related fields, and technical and semi-professions.

SUNY also has 1 + 1 programs where students can complete A.A.S. (two-year) degrees with credits earned from more than one college. The state also has upper-level colleges that receive "lower-division" graduates from nearby community colleges or technical institutes. Private universities in the state allow substantial amounts of credit in advanced standing toward professional degrees.

A competent and energetic central SUNY staff is conducting a variety of research projects on transfer, and urging the extension of cooperative efforts to improve student exchange. One of the most valuable contributions of the SUNY staff was published in 1985 as a guide for transferring occupational credits between high schools and colleges/universities. This diversified document will be described in greater detail in a later section on vocational-technical education.

A section of a recent SUNY publication, Report of the Chancellor's Task Force on Community Colleges, identifies activities among state universities, state-supported colleges, and community colleges that include articulation support services. The task force urged that SUNY Central Administration develop model support services for transfer students, i.e., accurate entrance processes and greater financial support. A transfer office as well as a support services director for transfers was recommended.

The City University of New York, a much older organization, has had a transfer policy since 1974. The central office maintains a comprehensive course equivalency guide. A recent addition to the system policy grants full transfer of all community college arts and sciences courses. At least 9 units

must apply to the B.A. major in a CUNY university. CUNY colleges and universities are heavily involved with high schools through the City Board of Education.

The City University published a course equivalency guide in 1985. The CUNY guide is an excellent counseling/advising tool. Difficult to keep current particularly in New York (as compared to the numbers of higher institutions in Arizona) the material conforms contains comparable lists of general education equivalencies in lower- and upper-division. Through 1987, five faculty task forces continued the process of addressing credit transfer problems. Each group was composed of a faculty member from each of the 17 colleges in the CUNY system. A senior college and community college faculty member co-chaired each committee. The easing of status consciousness and elitism were among the most important benefits.

North Carolina

Significant progress in improving options for transfer students continues in North Carolina. The state first gained national prominence for policies on general education and vocational-technical transfer developments in the early seventies.

The University system has taken leadership in academic transfer, as mandated by the general statutes of the state. The Office of the University Vice President of Student Services and Special Programs serves as the professional staff to the statewide Joint Committee on College Transfer Students, and is responsible for publications. Special reports on articulation and transfer policies of senior colleges and university campuses are released annually, and are among the most complete references found anywhere. Guidelines for Transfer, updated every few years, is a unique state document.

The "Transferability of Credit" chapter is more complete than any other found on the subject. Increasing interest in services is noted in other University documents. The Vice President has recently released a third compendium of papers by student services officers of the several University campuses. Those publications are helping to improve communication with community colleges and technical (postsecondary) institutes.

On vocational-technical transfer, North Carolina first gained recognition through the Allied Health Articulation Project that provided opportunities to combine vocational-technical subjects with general academic curricula. While progress has been slow in gaining senior college support, particularly for general education offered by technical institutes, a statewide committee monitoring progress, continued to urge acceptance. Interinstitutional agreements resulting from the allied health project now serve as models for the rest of the nation.

Three basic curricular patterns were projected in the initial study:

1. Preprofessional curricula that ordinarily begin as associate degree programs (physical therapy, medical technology, and occupational therapy).
2. Basic professional curricula that are usually completed at the associate certificate or degree level (dental hygiene, respiratory therapy, and radiologic technology). The university component often provides more extensive preparation.
3. Intermediate professional curricula that, like the second model, are completed at the community college or institute but at a less sophisticated level (physical therapy assistant, medical record technician, and dietetic technician). Some programs such as the certified laboratory assistant or medical secretary are fewer than two years (Boatman and Huther, 1975).

Groups of courses were outlined for the lower- and upper-division, placing general education at both levels, and guidelines were suggested following brief discussions of problems. These discussions dealt with student services,

admissions, grading, and institutional autonomy, and contributed to the general value of the report.

The fact that both community colleges and technical institutes continue to offer technical degrees and certificates in North Carolina is a complication as well as a convenient environment. Another unusual feature was, and continues to be, the bachelor of technology degrees offered at senior institutions providing potential for programmatic relationships between two- and four-year colleges.

The Department of Community Colleges of the State Board of Education continues to urge a variety of arrangements between elementary and secondary education and the two-year institutions.

Recently, North Carolina joined South Carolina, California, Colorado, Florida and others in specifying freshman admission qualifications.

Rhode Island

The Rhode Island Transfer Guide for Students (revised 1987) shows a balance between institutional autonomy and state responsibility. Individual institutions determine their own general education and transfer programs. Unique courses must be described accurately in catalogues. The Guide contains lists of specific courses in the seven general education divisions of the three state institutions. Catalogs duplicate these lists. Articulation services are coordinated by an institutional officer, and a permanent interinstitutional committee reports to the Postsecondary Education Executive Council on student due process situations. A uniform course numbering system has been activated.

The Guide contains an unusual section on the "Direction of Student Transfer." The movement of transfers, i.e., "regular" (two- to four-year

college), "reverse" (four- to two-year college), "lateral" (two- to two-year college) does not affect the transferability of credit. The three types, "regular," "reverse," and "lateral," are often treated differently in credit awarding. Rhode Island has one of the few statements on equality for irregular transfers.

References are also made in the Transfer Guide to the assessment of experiential learning. Institutions are required to publish criteria for measuring and granting credits, and are urged to consider prior learning experiences credit on the same basis as credit for regular course work.

South Carolina

Under the direction of the Commission of Higher Education, South Carolina has moved ahead rapidly on transfer policy. One of the few states with technical institute/state university transfer relationships, academic courses ordered by the state's technical institutes in associate degree programs are now accepted by the state universities. Negotiations were conducted voluntarily without state mandate. The agreements represent the first step toward a statewide general education code.

The state Master Plan for Higher Education (1979) gave the authority for Commission policies on transfer. This is one of the important documents in the recent literature on transfer.

Policies on statewide freshman admission to public senior colleges and universities took effect fall term 1988. Included in the high school subject package must be four years of English, three of mathematics, and two years each of foreign language and laboratory science. Similar university freshman admission requirements were recently adopted in California, Colorado, and North Carolina.

Texas

The Texas Modified Core Curriculum, one of the early statewide policies mandated in 1968 by the Texas Education Code, is actually a basic set of recommended general education courses freely transferable from community colleges when the courses are considered baccalaureate degree requirements. The Modified Core offers a degree of flexibility beyond a specific list of required courses.

Several changes have occurred in recent years. In 1981, an articulation officer policy was added, and two years later, provisions for credit in lieu of course enrollment was included for non-traditional modes, i.e., national examinations, experiential or prior learning, and the military.

Recent legislation requires each institution of higher education to submit to the Coordinating Board a statement of the specific content and rationale and objectives of its core curriculum. The Board appointed an advisory committee to review and evaluate all core curriculum statements.

Texas has joined the growing list of states now requiring diagnostic testing of basic reading, writing, and math skills to identify the need for remedial work. Required of all full- and part-time freshmen and transfers with less than 60 hours credit, students must pass the exam before enrolling in any upper-division course beyond the 60 hour limit. The test is not used to determine college admission, and the state continues to fund approved non-degree credit remedial courses.

Vocational-technical course transfer has also been improved through recent state legislation. Responsibility was shifted from the Texas Education Agency to the State Coordinating Board. Competency-based evaluation developed from occupational objectives is promoted.

Other legislation requires senior public institutions to report first-year academic performance of entering students to their respective high schools and community colleges.

Washington

For more than a decade, the State of Washington has had an inter-institutional committee on articulation and transfer. The first transfer guidelines released in 1971 by the Inter-College Relations Commission and subsequent editions provided the basis for academic course agreements with senior colleges, but only peripherally with the University of Washington and the State University. Legislation passed in 1983 mandated action, and a year later, an inter-college transfer agreement was announced. All public and private institutions, including the major universities, have now endorsed the agreement. Individual community college/university arrangements were superseded.

A.A. degree packages have resulted. Vocational-technical transfer is left to individual institutions. The general education requirements are comparatively comprehensive. A quantitative skills requirement is likely to be voted by the Commission. The proposal will strengthen the quantitative skills component by requiring some quantitative courses for which intermediate algebra is a prerequisite. This will bring the quantitative skills requirement for the associate degree in line, and will equal or exceed requirements in four-year institutions.

The statewide agreement focuses on completed degrees. However, the document recommends the transfer of similar numerical values for acceptable courses. Packages may also contain courses that are individually transferable. Institutions are allowed course content flexibility. Articulation services

are not addressed except for sections recommending better information exchange and student rights.

The State Board for Community College Education is urging four-year institutions to guarantee admission of community college degree holders. Transfer options are limited because of the increasing number of high school graduates applying for university admission, particularly in western Washington.

The legislature has recently reconstituted the Higher Education Coordinating Board with policy-naming responsibilities. The new board has taken over the responsibility of stipulating freshman admission requirements at senior institutions. Centralization of power at the state level is apparent in this move. The commission, named earlier, evaluates articulation and transfer under the State Board for Community College Education.

Table D

ARTICULATION AND TRANSFER:
SIGNIFICANT PROGRAMS AND ACTIVITIES IN SELECTED STATES

STATES	PROGRAMS AND ACTIVITIES
Arizona	<u>Higher Education Equivalency Guide</u> , Higher Education Linkage Program (HELP), Handbook for WICHE Task Forces, Vocational Education Act, 1982
California	UC Core Curriculum, Transfer Center Program, CAN Project, Project ASSIST, Articulation Officer Handbook, UCLA/TAP Program, <u>The Master Plan Renewed</u>
Florida	College Level Academic Skills Test (CLAST), common numbering system, common calendar, common entry test, AGIS (Miami-Dade Colleges), McKnight Programs in Higher Education
Illinois	Commonwealth Transfer Compact, business education transfer, articulation coordinator system
Massachusetts	Commonwealth Transfer Compact, New England Transfer Articulation Association
Minnesota	<u>Definition of College-Level Skills</u> , <u>Associate Degree Standards</u>
Missouri	Revisions of original statewide agreement including experiential learning, student appeal process
Nevada	Capstone Programs, common course numbering
New York	SUNY 2 + 2 and 1 + 1 Academic Transfer Contracts, SUNY/STEP Program, CUNY Course Equivalency Guide. SUNY guide for transferring occupational credits, officers, articulation
North Carolina	<u>Guidelines to Transfer</u> , Allied Health Articulation Project, freshman admission qualifications
Rhode Island	<u>Transfer Guide for Students</u> , "irregular" transfers, articulation officers
South Carolina	Technical institute/university transfer relations, <u>Master Plan for Higher Education</u> , freshman admission qualifications
Texas	<u>Modified Core Curriculum</u> , state diagnostic testing
Washington	<u>Associate Degree Guidelines</u> , <u>Washington Transfer Agreement</u>

SECTION II
INTERINSTITUTIONAL AND INTERSEGMENTAL ACTIVITIES
AND PROGRAMS - REVIEWS OF PARTNERSHIPS

Trends and directions in articulation and transfer are presented in this section. Developments in each of the five categories emphasize the tightening of secondary and postsecondary educational relationships. Formalized partnerships are featured in several of discussions.

Access to Higher Education for Disadvantaged Populations

Across the country, there is a focus on efforts to improve the number of ethnic minority students from high school moving into higher education. In many instances, state support lags for increasing minority involvement and for improving programmatic quality. Best progress in improving access for disadvantaged racial groups is still occurring in individual colleges rather than statewide. The Ford Foundation-sponsored Urban Community College Transfer Opportunity Program (UCC/TOP) has contributed to the upsurge of activities.

Phase one of the UCC/TOP two-part program began in September 1983 with one-year funding grants given to 24 colleges in 13 states to address specific areas of articulation and transfer. A diversity of activities resulted, i.e., orientation programs, equivalency guides, and transfer centers coordinating the mechanics of transfer as well as articulation services. For example, six community colleges began or expanded specialized counseling services, including four in California, and six (three in New York) focused on data collection and information dissemination.

Phase two starting in October 1984 included five of the original group of community colleges. Programs of greater comprehension were funded. Most of the colleges in New York City, Philadelphia, Miami, Cleveland, and Phoenix

concentrated on improving academic partnerships with universities and curriculum development projects with high schools. Faculty development was expanded, information data bases improved, and research projects begun. Smaller grants were given to 17 of the original 24 colleges to continue phase one projects.

A book published by the American Association of Community and Junior Colleges in 1987, Transfer: Making It Work, edited by Richard Donovan and Barbara Schaier-Peleg, offers recommendations in five crucial areas of articulation and transfer identified by UCC/TOP colleges.

- Collaboration between two- and four-year colleges,
- Collaboration between two-year colleges and secondary schools,
- Student follow-up and data collection,
- Academic environment, and
- Student services.

Many of the UCC/TOP colleges provide models for improving access to upper-division education for the disadvantaged.

A plethora of collaborative programs under different sponsorship has been initiated by community colleges and universities, alike. The Higher Education Linkage Program (HELP) was started by the University of Arizona to improve opportunities primarily for minority students from Pima Community Colleges and Cochise College. HELP, funded by the Mellon Foundation, includes early admission status, priority housing, orientation, dual advising and other articulation services.

The McKnight Programs in Higher Education in Florida are also privately funded. "The Centers of Excellence" provide cultural programs and services for Blacks and other minority students from kindergarten through college. These efforts are designed to improve academic skills.

Among state efforts, the STEP program (Science and Technology Entry Program) developed by the Regents of SUNY affects both public and private education. STEP allows junior and senior institutions the right to compete for grants to help economically disadvantaged secondary students and ethnic minorities. STEP is described in more detail in the New York state summary.

Improving access to higher education for low- and moderate-achieving high school students, many of whom are ethnic minorities, has gained national attention. At least four states, Florida, Minnesota, New York, and Oklahoma, have high school/college current enrollment models.

The several programs operating in New York City, in particular, have been widely publicized and studied, i.e., the City-as-School (public alternative high school), the College Now program (sponsored jointly by the City University and Board of Education, and Middle College High School). In the latter program, high school students are enrolled in classes at LaGuardia Community College and fully participate in college affairs. Middle College dropout rates continue to be lower than inner-city schools and about half of the graduates continue in higher education. Results of research studies on these three New York City efforts are shown in the Greenberg article. A discussion of the Middle College High School success is found in the Cullen and Moed article listed under SPECIAL BIBLIOGRAPHIES.

Similar high school/community college arrangements have been started under Ford Foundation support in Tennessee and Illinois. A collaborative effort has just been announced by the Los Angeles Community College District.

The New Jersey Department of Higher Education's Pre-College Academic Program that supports pre-college projects at a number of urban colleges addresses a transfer issue concerned with access and retention. A major objective is to increase collegiate enrollment of minorities and low achievers.

Remediation

Both community colleges and universities are heavily involved in remediation. Both offer basic skills (subcollegiate) make-up classes to help freshmen and transfers, alike. Assessment of basic communication skills is often required for placement in remedial courses, and periodic achievement testing is frequently mandatory. Often under university pressure, state legislatures or state commissions agencies legally given that responsibility are requiring or recommending university exemption from remediation, and community colleges are made solely responsible. Boldest advances are currently occurring intersegmentally, i.e., partnerships often including high school-community college-university faculty collaboration.

Several institutions belonging to the UCC/TOP have opened intersegmental programs with senior colleges for high risk students. Bronx Community College operates a dual admission program with CUNY senior schools. High school juniors who cannot meet senior college admission requirements are selected for special training, i.e., workshops, computer-assisted instruction, counseling sessions, and after passing freshman skills assessment tests, are placed for the second year in college-level courses transferable to a CUNY university.

Roxbury Community College and Boston College have launched a joint "Learning to Learn" program for poorly qualified students. Beginning in a five-week summer seminar, students are shown how to take lecture notes, study texts effectively, and anticipate examination questions. Special instruction continues during the fall term. In addition to these, UCC/TOP projects also serve as remediation models.

The Florida statewide assessment program is legislatively mandated. Remediation is required in both the state universities and community college--for students in universities with basic skill deficiencies and those in

community colleges who fail on the state placement tests. However, all remedial education is now being shifted to the state's high schools.

Collaborative efforts are underway in perhaps a dozen states by intersegmental faculty groups to define college-prep basic skill competencies. A national task force, The National Assessment of Educational Progress, Project Equality, and prominent test publishers have a wide variety of materials available to state commissions.

Vocational-Technical Education

Two decades ago, the only transfer avenue for vocational-technical credits was the university baccalaureate degree programs. Programmatic diversification and flexible delivery schedules to compensate for static academic enrollments and budgets in both community colleges and universities attracted career-oriented high school graduates.

A research report by David Bushnell who identified early transfer agreements primarily between high schools and community colleges in a dozen states, and the efforts of the National Occupational Competency Testing Institute which created written and performance examinations, gave impetus to interinstitutional negotiations. The work of Don Carpenter was particularly helpful in the specifics of transfer agreements. Carpenter described two models:

1. Joint degrees - an associate degree is given by a two-year college and a baccalaureate by a nearby university. Each institution is responsible for its own courses. Lower division is transferable. Simultaneous attendance is often allowed.
2. Merged degrees - the liberal arts content of a degree is specified according to the vocational field. Both faculties contribute to the teaching that often occurs on either the two- or four-year college campus (Carpenter, 1979, p. 6).

The law enforcement core curriculum in Texas community colleges was one of the first of the joint degree programs--a 21-unit curriculum plus a liberal

arts component--active since 1974. The Allied Health Articulation Project announced in North Carolina the same year contained three basic curriculum patterns: (1) professional curricula beginning with the associate degree, (2) basic professional curricula completed at the associate level, but with advanced university work, and (3) intermediate professional curricula also completed at the two-year college. These become preparatory when the courses move to the baccalaureate level.

These joint degree models, the Texas core curricula and the North Carolina allied health patterns, have been considerably expanded into statewide, regional, formal agreements, and interinstitutional arrangements.

Cooperative integrated programs for science and technology were early examples of the merged degree type. Florida Atlantic University (then an upper-division university offering some doctorates) and Palm Beach Junior College developed such integrated programs. Courses in the major were taught at the university and the preparatory and general courses at the junior college. Sangamon State University and Illinois Central College began a similar arrangement. This "upside down" format with liberal arts in one institution and technical studies in another, were given simultaneously or in that order. These joint programs have since grown dramatically. Technical training and experience in industry supplemented by general courses at the community college have also expanded.

Dale Parnell, perhaps the most visible single personality in promoting cooperative community college-university cooperative programs, has given national recognition to the 2 + 2 tech-prep/associate degree format. In his 1985 book, The Neglected Majority, Parnell refers to 2 + 2 as the high school/community college connection, the way to make winners of ordinary students. In Chapter VII, he presents organizational core models for the four-year programs.

Tables E and F depict the community college portion of 2 + 2 curricula. Table E shows the structure with a common core of learning, a technical core, and specialty sequences. Leno Pedrotti, the originator, refers to this as the "general philosophy." Table F identifies specialty area courses for technology curricula.

Two-plus-two agreements, as Parnell urged between high schools and colleges, are emerging statewide. Arizona is a leading example. Legislatively-mandated by the 1982 Vocational Education Act, agreements involving individual districts and regions that include other public resources have developed. Highlights are described in the California Postsecondary Education Commission Report of March 16, 1987:

1. Community college contract with school districts to provide training in a variety vocations. (Tempe Unified and Maricopa Skills Center).
2. Agreements between vocational-technical centers and community colleges are based on competency equivalences testing results (Scottsdale High School and Community College).
3. Occupational Competencies developed in high schools earn community college credits. Nurse students completing the practical nursing course at the Vocational Center and pass the state licensing exam are given first-year college credits (Maricopa Technical Community College and Phoenix Union High School District Area Vocational Center).
4. High schools and community colleges use same facilities, laboratories, and develop integrated curricula. Food Services is an example (Phoenix Union High School District Vocational Center and Phoenix College).
5. Regional agreements coordinating all public resources have developed between Mesa Community College and the public schools.
6. Sharing faculty as well as facilities and equipment is occurring between Deer Valley Vocational-Technical Center and Glendale Community College.

State-level 2 + 2 agreements, both voluntary developed or legislatively-encouraged, are appearing between community colleges and universities.

Table E

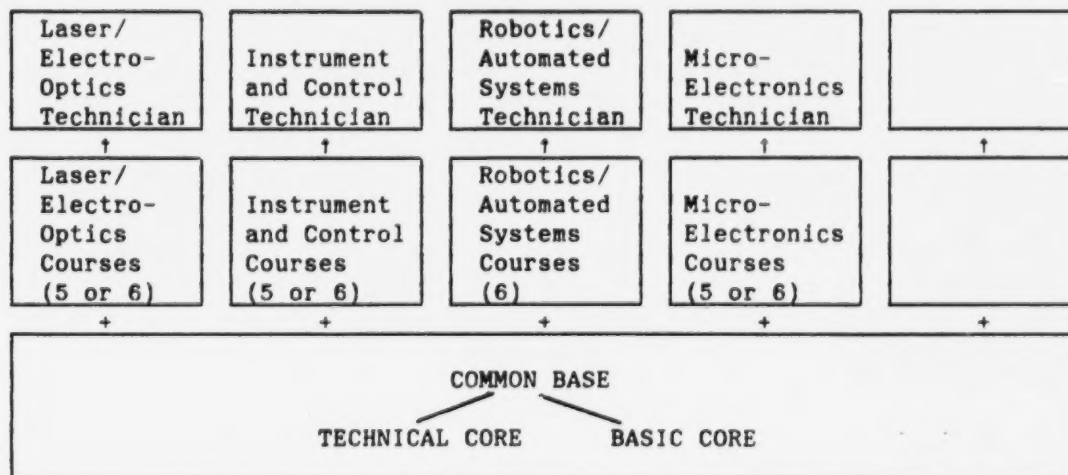
POSTSECONDARY CURRICULUM STRUCTURE--GENERAL PHILOSOPHY

SPECIALTY AREA	• Six courses selected for specialization in appropriate Hi-Tech area	SPECIALIZATION
TECHNICAL CORE AREA	• Electricity • Electronics • Mechanics • Electromechanics • Materials • Fluids • Thermic • Graphics • Controls • Computers	COMMON CORE
BASIC SKILLS AREA	• Mathematics • Science • Communications • Computer Literacy • Socioeconomics	

Source: Leno S. Pedrotti, "Redesigning Vocational Curricula--Postsecondary Curriculum Design Guidelines." Presentation at the American Vocational Association/Center for Occupational Research and Development Regional Workshop, Harper's Ferry, West Virginia, May 3-4, 1983.

Table F

POSTSECONDARY TECHNOLOGY CURRICULA



Source: Pedrotti

Examples of the voluntary type are found in many states. These are often limited to particular technical specialties. In Colorado, associate in applied science degrees in technical management, transfer to the State University. In Arizona, a variety of A.A.S. degrees are accepted by the university system. In some states, California and Washington are two, the exchange of vocational-technical credits is hampered by the location of the courses. Similar courses may be lower-division in the community colleges and upper-division in state universities. Lower- or upper-division placement of technical courses is one of the confusing problem areas. The 1 + 1 cooperative program in New York is described in Section I.

Legislation in several states, has recently encouraged or mandated cooperative action: in Illinois (grants through the State Board of Education to develop agreements between high schools and community colleges), and in Minnesota (required collaboration between the area vocational-technical institutes and community colleges).

Two-plus-two-plus-two agreements are now planned. Still in the discussion stages, these collaborative arrangements would add either the high school at the beginning of a six-year continuum or the university at the end. Systems of public education will, in time, be closely linked in vocational-technical education.

Computerized Information Systems

Colleges and universities across the country are criticized for collecting and distributing invalid and unreliable student data. This widespread situation confuses state commissions whose reports to state legislatures are often inaccurate and inconsistent. While all institutions and systems attempt to collect relevant information, few have data bases that provide current transfer information for students, counselors, and faculty on transfer

possibilities or to track student progress. Unreliable data collection and uniformity of institutional reporting is a chronic problem in many states. The lack of common definition and consistent reporting to state agencies and legislatures complicates the budgetary process and weakens attempts to develop statewide policy.

A FIPSE-funded project involving four states--Arizona, California, Colorado, and New Mexico--in the Western Interstate Commission for Higher Education--has resulted in on-line student information systems allowing students direct access to credit and course transfer. Three of the four states developed computerized systems for counselor and student use. The California microcomputer ASSIST program is used in the state-funded Transfer Center System located on community college and university campuses. In Arizona, Maricopa Community College District developed a course equivalency/degree audit program for its digital VAC computers. Colorado State University is using a configuration of soft- and hardware (IDMS/R and IVM 4381).

Secondary projects were completed by the mid-1985 termination date, including a Faculty Articulation Handbook in Arizona and a guaranteed student transfer contract between Colorado State University and the Community College of Denver. New Mexico was less successful. Transfer agreements in allied health computer science, engineering technology and business and agriculture are pending there.

The WICHE project was originally conceived as a relatively simple mechanical procedure of entering information into a computer program on the transfer value of specific courses. This proved to be only the first step. Course acceptance by departments was equally important to include. The following quotation from the WICHE report could help planners in other regions of the country:

As our work on this project proceeded we learned that at a minimum, the footnotes in a useful on-line interactive system should contain information about majors available to students given their community college experience, information about financial aid, a listing of programs that are highly selective because of demand (often called impacted programs), application deadlines and the catalog year under which a student plans to articulate. For successful transfer, students should be provided with a list of available student services, information about how to use these services, and information about the differences in the environment of the four-year institution as contrasted to their community college experience (WICHE, 1985, p. 6).

The Miami-Dade Advisement and Graduation Information System (AGIS) has been widely publicized and emulated. AGIS is a computer based system that is used to monitor students' progress as they proceed through the various degree programs. The system provides accurate, up-to-date information on student progress to graduation requirements. A graduation check, one of the major components, realigns student transcripts by requirement area rather than by semesters. Students are informed about their progress. The system checks for graduation certification by identifying completed courses and currently active courses. If the student has satisfied all graduation requirements, the system automatically will graduate the person and place comments on the permanent academic record (Schinoff and Kelly, in Kintzer, 1982, pp. 73-74).

Another major component is the Florida College Recommended Courses outline. This report provides the student and faculty advisor a listing of courses suggested for transfer by the nine state universities and four private colleges in Dade County. This system also generates outlines of suggested courses by major and by university for each student. Students are informed if they have completed, are currently enrolled in, or are enrolled for a future term in any of the required or suggested courses for transfer. A special AGIS report allows students to match their record instantaneously against any of the A.A. degree transfer outlines. This document can then be used by advisors

and students to identify future requirements for any of the A.A. degrees offered at Miami-Dade.

(Several other computerized information systems are referenced in the state summaries.)

Business and Industry, Proprietary Schools, and The Military

Employer-sponsored education, proprietary school training, and instruction for the military provided externally by traditional colleges and universities should all be seriously considered in statewide articulation and transfer planning. As the first two "outsiders"--business and industry and proprietary schools--are granted accreditation and begin to form "legitimate" linkages with state institutions, the need for guidelines and policies is readily recognized. State governments and responsible agencies become particularly vulnerable when corporate colleges and proprietary institutes achieve the right to offer degrees, to receive and export transfer students. Several states listed in categories 1 and 2 (Table A) have developed statements, but the courses and students remain unrecognized.

A formidable array of courses, including degree programs, is now offered by corporations large and small, labor unions, professional organizations, and agencies at all levels of government. Students regularly approach college and university admissions personnel for transfer. The second edition of the Guide to Campus-Business Linkage Programs (1986) contains over 300 campus-business linkages. The degree and certificate combinations are tied to accredited institutions, most frequently community colleges. The "regular" colleges provide general education components and corporations, the technical training. Agreements are usually very specific. Credits are not broadly applicable. Some state-level guidance is advisable to maintain acceptable quality levels of the joint programs.

Clues for preparing guidelines and policies on higher education/corporate education may be found in the Eurich book listed in the SPECIAL BIBLIOGRAPHY. Institutions as well as states should seek the services of the American Council on Education Office on Educational Credit and Credentials. One of the Office's functions is to determine credit equivalencies for various types of extra-institutional learning (learning attained outside the sponsorship of legal authorized and accredited postsecondary educational institutions--work and life experiences, independent reading and study, formal courses sponsored by corporations, associations, unions, and agencies). The Office also maintains evaluation programs for formally structured courses offered by the military, and civilian noncollegiate sponsors.

Relationships between proprietary schools and their counterparts in public education--community colleges--remain strained. Some attempt to work together and to exchange students can be traced to individual institutions. Transfer agreements are almost non-existent. The Middle States manual cited under SPECIAL BIBLIOGRAPHIES is one of the few accreditation documents offering policy direction. The 1978 manual contains an extensive section on proprietary postsecondary degree-granting institutions. Commission evaluators are asked to pursue questions pertinent to articulation and transfer. The Middle States material could be valuable to state commissions engaged in policy preparation.

The State of Maryland is one of the few to have a transfer policy related to proprietary schools and community colleges. Broad guidelines precede the policy statements. Such matters as monitoring proprietary school courses, determining course comparability, and directions for course evaluation are given in detail, i.e., course outlines, textbooks, facilities, contact hours, testing procedures, grading, and the faculty. Proprietary school students can

now earn credits toward A.A. degrees. The Maryland policy statements should be a model for other states.

Military service personnel are now entering the transfer mainstream in impressive numbers. The largest and most comprehensive organization serving the military is the Servicemembers Opportunity College (SOC). Two year colleges, well over 600 of them, have become "opportunity colleges" under the SOC program. Servicemembers who cannot participate in residence degree work can transfer in military base-earned credits and enroll temporarily in member institutions near military bases. Institutions agree on course comparability, and assure transfer to other member colleges. Graduates can enter upper-division without penalty. Only general education portions of the SOCAD (associate degree) programs are transferable. In the last few years, associate degree packages have been expanded to baccalaureates. B.A. degree-member colleges are now included in SOC.

Extra-institutional learning opportunities are spreading rapidly across the country. Relationships between organizations who provide this education and the regular segments of higher education are as yet individualized. Direction at the state-level is strongly advised.

SECTION III

Annotated Bibliography

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This is the second edition developed by a joint task force of six national associations. The first edition, published in 1967 was the basic document for the early state agreements. The material addresses problems encountered by students who transfer back and forth among postsecondary institutions. A model agreement is discussed. Validity of extra-institutional and experiential learning for transfer purposes is identified.

California Postsecondary Education Commission. Transfer Articulation and Collaboration Twenty-Five Years Later. Sacramento: CPEC. (draft) March 16, 1987.

This report resulting from a national study funded by the Ford Foundation is a comprehensive review of major themes in articulation and transfer. Chapter 2 offers a comparison of the situation in the 1960s when Dorothy M. Knoell (the chief investigator) and Leland Medsker completed their well-known national study of the junior college transfer function. This document, in draft form at this writing, is the most complete study available.

Cohen, Arthur M. and Florence B. Brawer. The Collegiate Function of Community Colleges. San Francisco: Jossey-Bass, 1987.

This book presents analyses of the transfer function as the basic role of community colleges. Liberal arts curricula are discussed in detail. National, state, and local regulations governing interinstitutional cooperation are also compared. The book is highly recommended for state planners and governing board members.

- Kintzer, Frederick C. (ed.), Improving Articulation and Transfer Relationships. New Directions for Community Colleges. No. 39. San Francisco: Jossey-Bass, 1982.

This volume was published at an interval when colleges and universities were entering a period of heavy economic strain and policy pressure from state governments. Lead articles by Dorothy Knoell and Gerald Kissler are frequently quoted. Several practices that have since received national recognition are described, i.e., the Miami-Dade AGIS Program and the Michigan ESCALATE system. The role of the chief instructional officer of a community college is discussed in depth. Community college/proprietary school relationships prescriptive specialized accreditation (collegiate schools of business) are also reviewed.

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- Prager, Carolyn. (ed.) Enhancing Articulation and Transfer. New Directions for Community Colleges. No. 61, San Francisco: Jossey-Bass, 1988.

This New Directions book is the most recent statement on articulation and transfer. Several writers account for the intervention of private foundations, state legislators, and interstate commissions to bolster and reformulate the articulation and transfer functions. Emphasis is given to interinstitutional and intersegmental faculty collaborative efforts. Particular attention is also given to techniques to improve community college academic studies.

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